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## **REMARKS**

Reconsideration and allowance of the above identified patent application are hereby requested. Claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are now in the application with claims 1, 53, 58, 59, 81, 91, and 103 being independent. The Examiner is thanked for withdrawing the rejection under 35 U.S.C. §101. The Office's rejections are respectfully traversed.

## Rejection Under 35 U.S.C. §103

Claims 1, 2, 4, 6, 8-12, 14-17, 22-25, 27-28, 30-34, 41-53, 55-59, 61-64, 66-81, 83-85, 87-93, and 95-101 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,327,574 to Kramer et al. in view of U.S. Patent No. 6,363,419 to Martin Jr. et al. Claims 18-21 and 35-40 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 5,761,662 to Dasan. Claims 26 and 94 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 6,869,018 to Filfield et al. Claim 29 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of Agrawal et al. ("On Integrating Catalogs"). Claims 103-105 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 5,855,015 to Shoham. The Office's contentions are respectfully traversed.

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# **CLAIM 1**

Claim 1 recites (emphasis added) "...a virtual database <u>accessible to</u> the at least one <u>mobile communications device</u> over the at least one network, wherein said virtual database comprises: a <u>user profile including</u> at least one <u>actual user characteristic</u> received over the at least one network; a <u>heuristic modeler that generates</u> at least one <u>heuristic user characteristic</u> in accordance with the at least one actual user characteristic, wherein the <u>heuristic user</u> characteristic is stored in the user profile; and...."

The Office (Action of March 31, 2008 at pages 6-7) asserts that Kramer et al. teach (emphasis added)...

at least one actual user characteristic received over the network (at least the facts, col. 20, ll. 65-66, fig. 8, interpretation of <u>user characteristic documents 806</u> and stored into <u>database 804</u>); and a heuristic a heuristic modeler (at least the mapping and sorting, fig. 8, #810, #816) that generates at least one heuristic user characteristic (at least the attribute vector, cols. 21-32) in accordance with the at least one actual user characteristic, the <u>heuristic user characteristic stored in the user profile</u> (at least the software attribute vector mapping uses data from the facts in the database, fig. 8, col. 21, ll. 1-6);....

Kramer et al. fail to disclose the claimed subject matter.

With respect to the claimed user profile, the Office (*Id.* at pages 2-3) further contends that (emphasis added)...

The <u>user profile</u> is not defined in the claim as requiring <u>only one data source</u>. Therefore, using the broadest reasonable interpretation of the claim language, the claim limitation is met since the information about the user (i.e., the "user profile") of Kramer is <u>stored both in the database and the attribute vector</u>, and thus collectively interpreted as a user profile.

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The Office incorrectly interprets the claim language and Kramer et al.

Claim 1 recites that the user profile contains both an actual user characteristic and a heuristic user characteristic. In contrast, the Office (*Id.* at pages 6-7) asserts that the database 804 disclosed by Kramer et al. stores at least one actual user characteristic and that the attribute vector 808 disclosed by Kramer et al. represents the at least one heuristic user characteristic. However, Kramer et al. (Col. 21, lines 51-58) clearly teach that the database 804 and attribute vector 808 are separate structures. For example, Kramer et al. state (emphasis added)...

The Illumination Sorter 816 then uses <u>data from three data sources</u> (the <u>database</u> 804 directly, the <u>attribute vector 808</u>, and the <u>Boolean Abstractor 812</u>) to do two things. First, it selects a set of illuminations that match either <u>facts about the</u> <u>consumer in the database</u> 804 <u>or</u> the <u>consumer's attribute vector 808</u> well enough. Second, the Illumination Sorter 816 sorts the selected illuminations in an order determined via a match score computed <u>from the three data sources</u>.

Therefore, Kramer et al. do not disclose or suggest a <u>user profile including</u> at least one <u>actual user characteristic</u> received over the at least one network and a <u>heuristic modeler that generates</u> at least one <u>heuristic user characteristic</u> in accordance with the at least one actual user characteristic, wherein the <u>heuristic user characteristic</u> is <u>stored</u> in the <u>user profile</u>, as recited in claim 1.

Further, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose or suggest a <u>virtual database</u> comprising the recited <u>user profile</u> that is <u>accessible</u> to the at least one <u>mobile communications device</u> over the network. The Office (Action of March 31, 2008 at page 6) contends that Kramer et al. teach a virtual database accessible to a communications device <u>over the network</u>. However, this contention is <u>inconsistent</u> with the Office's interpretation of the user profile discussed above.

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The Office (*Id.* at pages 6-7) asserts that the virtual database, as disclosed by Kramer et al., comprises both the database 804 and the attribute vector. However, Kramer et al. do not teach that the attribute vector is accessible over the network. Rather, Kramer et al. (Col. 20, lines 61-66) disclose only that the database 804 can be resident outside of the device. Further, Kramer et al. (Col. 20, line 66 – Col. 21, line 6 and Fig. 8) teach that the mapping subsystem 810 that generates the attribute vector is part of, and thus local to, the computing device 802.

Moreover, Martin Jr. et al. (Col. 7, lines 60-64) teach that a browser of a wireless device can fetch "idle content" over a wireless network, but do not teach or suggest accessing a <u>virtual database</u> that includes the claimed user profile. Therefore, contrary to the Office's assertion, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose or suggest a virtual database that includes the recited user profile and is accessible to the at least one mobile communications device over the at least one network, as recited in claim 1.

For at least these reasons, claim 1 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 2, 4, 6, 8-12, and 14-52 depend from claim 1 and therefore are allowable for at least the reasons discussed with respect to claim 1.

### CLAIM 6

Claim 6 recites (emphasis added) "The targeting system of claim 1, further comprising at least one monitor, wherein said at least one monitor monitors the at least one mobile communications device, wherein said monitor is communicatively connected to said virtual database, and wherein at least one actual user characteristic is <u>varied</u> in accordance with at least one <u>output of said at least one monitor</u>."

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With respect to claim 6, the Office (Action of March 31, 2008 at page 8) asserts that (emphasis added)...

...<u>Kramer</u> of claim 1 further <u>teaches at least one monitor</u>, wherein said at least one monitor <u>monitors the mobile communications device</u> (e.g., user transactions), wherein said monitor is communicatively coupled to said virtual database (see client and server side components starting from col. 12, l. 1), and wherein <u>at least one actual user characteristic is varied in accordance with at least one output of <u>said at least one monitor</u> (see "updating a consumer model", col. 24, l. 36).</u>

Kramer et al. fail to disclose the claimed subject matter.

With respect to claim 1, the Office (*Id.* at page 7) concedes that Kramer et al. do not teach a <u>mobile communications device</u>. Therefore, Kramer et al. <u>cannot</u> disclose a monitor that monitors a mobile communications device.

The Office (*Id.* at page 3) asserts that "claim 6 (e.g., the 'mobile communication device') is met by the combination of references as applied above in claim 1." The Office, however, asserts only that <u>Kramer et al.</u> teach the claimed monitor. Further, contrary to the Office's assertion, "user transactions" are not equivalent to <u>monitoring</u> a mobile communications device. Kramer et al. (Col. 4, lines 44-47) define a transaction as "an event where some amount of resources or information are exchanged between the consumer and a vendor (or content provider) at some particular time or over some particular time interval." Monitoring an <u>exchange between a consumer and a vendor</u> is not equivalent to monitoring a mobile communications device. Thus, the Office has failed to show how Kramer et al. disclose <u>at least one monitor</u>, wherein said at least one monitor <u>monitors the mobile communications device</u>, as recited in claim 6.

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Because Kramer et al. do not disclose the claimed monitor, Kramer et al. also do not disclose that at least one actual user characteristic is varied in accordance with at least one output of the monitor that monitors the at least one mobile communications device. The Office (Action of March 31, 2008 at pages 3 and 8) asserts that Kramer et al.'s disclosure of updating a consumer model (Col. 24, line 36 – Col. 25, line 39) discloses varying an actual user characteristic. However, Kramer et al. (Col. 25, lines 1-4 and Col. 27, lines 7-20) teach updating the consumer model in response to transactions that occur at a store. Updating a consumer model based on transactions at a store is not equivalent to varying an actual user characteristic in accordance with output of a monitor that monitors a mobile communications device. Further, Martin Jr. et al. also do not disclose varying an actual user characteristic in accordance with an output of the claimed monitor. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. fail to disclose, teach, or suggest the subject matter recited in claim 6.

For at least these reasons, claim 6 also is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. based on its own merits. Claims 8-11 depend from claim 6 and therefore also are allowable for at least the reasons discussed with respect to claim 6.

## CLAIM 53

Claim 53 recites (emphasis added) "...a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device; a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data;...."

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As discussed above with respect to claim 1, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest a <u>user profile</u> including an <u>actual</u> characteristic about said user and a <u>heuristically determined</u> characteristic about said user, as also is recited in claim 53. Rather, Kramer et al. teach that the database 804, which the Office asserts contains an actual user characteristic, and the attribute vector 808, which the Office associates with a heuristic user characteristic, are <u>separate and distinct</u> objects.

Further, the Office (Action of March 31, 2008 at page 19) concedes that Kramer et al. do not disclose a monitor that detects <u>current time and location data</u> associated with a mobile communications device. The Office (*Id.*) also acknowledges that Kramer et al. do not teach a virtual database that includes one or more items of detected time and location data. Nonetheless, the Office (*Id.* at page 4) asserts that Kramer et al. (emphasis added) "suggests storing 'time' data from a mobile device." However, the Office has admitted that Kramer et al. do not disclose a mobile communications device. Moreover, the cited portion of Kramer et al. (Col. 27, lines 8-20) describes using consecutively numbered <u>transactions periods</u> that do not specify any <u>time</u> increment, not time data associated with a mobile communications device. Therefore, Kramer et al. <u>cannot</u> suggest storing <u>time data</u> corresponding to a <u>mobile communications device</u>.

Additionally, Martin Jr. et al. do not disclose a virtual database that includes one or more items of <u>detected time and location data</u>. In fact, Martin Jr. et al. do not disclose <u>storing</u> time and location data associated with the mobile communications device. Rather, Martin Jr. et al. (Col. 11, lines 50-59) disclose that the idle content of the mobile device is <u>updated</u> when the <u>location</u> and/or time information associated with mobile device <u>changes</u>. Martin Jr. et al. (Col. 1, lines 46-52) further teach that the idle content is then displayed when the mobile device is not in use.

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Thus, the system of Martin Jr. et al. has no reason to <u>store</u> detected time and location data in a database.

For at least these reasons, claim 53 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 55-57 depend from claim 53 and therefore are allowable for at least the reasons discussed with respect to claim 53.

Further, claim 58 includes subject matter similar to that of claim 53. For example, claim 58 recites (emphasis added) "...a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device;...at least one second database comprising monitored information of behavior by the user of the wireless device wherein the at least one second database includes one or more items of detected time and location data;...." Therefore, claim 58 is allowable for at least the reasons discussed with respect to claim 53.

### CLAIM 59

Claim 59 recites (emphasis added) "...monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device; building a virtual database of information regarding the user, wherein the <u>virtual database includes</u> one or more items of <u>time and location</u> data corresponding to the mobile communications device; modeling at least one <u>probabilistic</u> <u>behavior</u> of the user in accordance with the virtual database;...."

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The Office (Action of March 31, 2008 at page 22) asserts that Kramer et al. teach (emphasis added)...

Modeling at least one probabilistic behavior of the user, in accordance with the virtual database (see for example the section on <u>consumer models and probabilities</u>, col. 24, l. 36 and also the section on col. 22, l. 16, and also see 'mapping and sorting,' fig. 8, #810, attribute vector, cols. 21-32);

Kramer et al. fail to disclose the claimed subject matter.

Claim 59 recites modeling at least one <u>probabilistic behavior</u> of the user in accordance with the virtual database, which includes <u>time and location data</u> corresponding to the mobile communications device. As the Office (*Id.* at page 7) concedes, Kramer et al. do not disclose a mobile communications device. Thus, Kramer et al. <u>cannot</u> disclose or suggest modeling a probabilistic behavior in accordance with a virtual database that includes time and location data corresponding to a mobile communications device.

Moreover, Kramer et al. do not teach modeling <u>behavior</u>. Rather, Kramer et al. (Col. 22, lines 16-66) teach that an attribute vector can have scalar values representing <u>interests</u>. Kramer et al. (Col. 24, line 36-46) also teach that each element of an attribute vector represents an <u>interest or preference</u>. Additionally, Kramer et al. (Col. 3, lines 10-14) teach that actual behavior is used to assess "the consumer's interests, preferences, and demographics."

Martin Jr. et al. also do not disclose or suggest modeling a <u>probabilistic behavior</u>. Rather, Martin Jr. et al. (Col. 6, lines 41-49) disclose displaying on a mobile device idle content supplied by a service provider. Accordingly, the proposed combination fails to disclose or suggest <u>modeling</u> at least one <u>probabilistic behavior</u> of the user in accordance with the virtual database, as recited in claim 59.

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For at least these reasons, claim 59 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 61-64 and 66-80 depend from claim 59 and therefore are allowable based at least on claim 59.

Additionally, claim 81 includes subject matter similar to that of claim 59. For example, claim 81 recites (emphasis added) "...means for accepting a <u>virtual database</u> of information regarding a mobile communications device user, wherein the virtual database includes one or more items of <u>time and location data</u> corresponding to the mobile communications device; means for <u>modeling</u> at least one <u>probabilistic behavior</u> of the user, in accordance with the virtual database;...." Therefore, claim 81 is allowable for at least the reasons discussed with respect to claim 59. Claims 83-85 and 87-90 depend from claim 81 and therefore are allowable based at least on claim 81.

# CLAIM 91

Claim 91 recites (emphasis added) "...a <u>storage database</u> comprising at least one <u>actual</u> <u>user characteristic</u> of the at least one user, at least one <u>heuristic user characteristic</u> of the at least one user, and one or more items of <u>time and location data</u> corresponding to the at least one mobile communications device; a <u>controller communicatively connected</u> to the at least one <u>network interface</u>, the at least one device interface, the searching interface, and the storage database; wherein said <u>controller generates</u> the at least one <u>heuristic</u> user characteristic <u>in</u> <u>accordance with</u> the at least one actual user characteristic and at least one item of time and location data, and wherein said controller generates a search for the searching interface in

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accordance with the at least one <u>heuristic</u> user characteristic, the at least one <u>actual</u> user characteristic, and at least one of the one or more items of time and location data."

As discussed above with respect to claim 53, the proposed combination of Kramer et al. and Martin Jr. et al. do not disclose storing time and location data corresponding to the mobile communications device.

The Office (Action of March 31, 2008 at page 31) asserts that Kramer et al. disclose (emphasis added) "a controller (at least a <u>processor controlling</u> the page illuminator and selection engine, fig. 6, col. 17, ll. 40-50)." Figure 6 of Kramer et al. does not show a <u>processor</u>. Further, contrary to the Office's assertion, Kramer et al. (Col. 17, lines 40-50) also do not disclose a <u>processor</u>. MPEP §2143 <u>requires</u> that the proposed combination of references teach or suggest all the claimed subject matter in order to establish a *prima facie* case of obviousness. The Office has failed to show how the proposed combination discloses the claimed <u>controller</u>.

Further, the Office (Action of March 31, 2008 at page 31) asserts that Kramer et al. disclose a controller (emphasis added) "communicatively coupled to the at least one network interface (the <u>communication with the network</u> is seen in col. 12, ll. 1-6)." Kramer et al. (Col. 12, lines 1-6) disclose...

1. Client Side Components The client side of TIC consists of a database which represents the TIC model of the consumer together with methods which populate the database (from document interpretation) and use the model for targeting and personalization of content.

The cited portion of Kramer et al. fails to disclose or suggest a <u>controller</u>, much less a controller communicatively connected to the a <u>network interface</u>. In fact, contrary to the Office's assertion, the cited portion also fails to disclose or suggest communication with a <u>network</u>.

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Additionally, the Office (Action of March 31, 2008 at page 31) asserts that Kramer et al. disclose that the "controller generates the at least one heuristic user characteristic (estimate) in accordance with the at least one actual user characteristic." However, the Office does not cite to a location in Kramer et al. at which the "estimate" can be found. Further, the Office (*Id.*) asserts that the attribute vector disclosed by Kramer et al. represents the at least one heuristic user characteristic. However, Kramer et al. (Col. 20, line 66 – Col. 21, line 4) teaches that the mapping subsystem 810 builds and updates the attribute vector. The mapping subsystem 810, as disclosed by Kramer et al., is not communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database. Therefore, Kramer et al. fail to disclose, teach or suggest the claimed controller.

Moreover, Martin Jr. et al. (Col. 5, lines 5-11) disclose a microcontroller, but do not disclose that the microcontroller is <u>communicatively connected</u> to the at least one network interface, the at least one device interface, the searching interface, and the storage database. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest the controller recited in claim 91.

For at least these reasons, claim 91 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 92-101 depend from claim 91 and therefore are allowable for at least the reasons discussed with respect to claim 91.

### **CLAIM 103**

Claim 103 recites (emphasis added) "...a <u>first data bank</u> of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one

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user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device;...."

The Office (Action of March 31, 2008 at page 41) concedes that Kramer et al. do not disclose a <u>wireless communication device</u> or determining a user characteristic in accordance with a <u>time and location monitor</u> that monitors the current location of the wireless communications device. Nonetheless, the Office (*Id.*) asserts that Martin Jr. et al. teach (emphasis added)...

A <u>wireless communications device</u>, and a <u>monitor that detects time and location</u> representing the current time and location of the device. Time and location is used to <u>provide even better targeted advertising</u> (col. 11, ll. 48-60).

However, the proposed combination fails to disclose the claimed subject matter.

Martin Jr. et al. do not disclose a <u>first data bank</u> of user characteristics that includes at least one user characteristic <u>determined in accordance with a time and location monitor</u>. To the contrary, Martin Jr. et al. (Col. 11, lines 48-60) disclose considering, <u>at the time</u> a cellular hand-off occurs, the time and the approximate geographic location of the mobile device for delivering targeted advertisements. The Office (Action of March 31, 2008 at pages 5-6) asserts (emphasis added) "The user's time and location <u>must be a user characteristic</u> because the time and location of the user is a <u>characteristic of the user</u>." Assuming *arguendo* that time and location represent a user characteristic, however, Martin Jr. et al. nonetheless <u>do not</u> disclose that the time and location are included in a <u>first data bank of user characteristics</u>, as recited in claim 103. In fact, Martin Jr. et al. do not disclose a data bank of user characteristics.

With respect to the time and location of a mobile device, the Office (Action of March 31, 2008 at page 41) also asserts (emphasis added)...

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to <u>modify Kramer</u>, such that the current time and location of a mobile device would be monitored, detected and <u>stored</u>, and the system would additionally use the time and location to provide advertisements.

However, neither Kramer et al. nor Martin Jr. et al. suggest storing a user characteristic determined in accordance with a time and location monitor.

Moreover, Shoham does not cure the deficiencies of Kramer et al. and Martin Jr. et al.

For example, Shoham (Col. 2, lines 39-45) is directed to the retrieval of hyperlinked information resources and hyperlinked information networks, and does not disclose a data bank of user characteristics. Accordingly, the proposed combination fails to disclose or suggest that a first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device, as recited in claim 103.

For at least these reasons, claim 103 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. in view of Shoham. Claims 104 and 105 depend from claim 103 and therefore are allowable for at least the reasons discussed with respect to claim 103.

Attorney's Docket No.: 21625-013001 Applicant: Kelley et al.

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# **Concluding Comments**

The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly contested. Accordingly, the above arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of that claim or other claims.

In view of the above remarks, claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are in condition for allowance and a formal notice of allowance is respectfully requested. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: June 2, 2008

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